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**Applied Physics Letters -- February 21, 1994 -- Volume 64, Issue 8, pp. 960-962**

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# Improved performance of quantum well infrared photodetectors using random scattering optical coupling

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(Received 15 October 1993; accepted 1 December 1993)

We demonstrate that a random scattering reflector on top of a quantum well infrared photodetector increases the optical coupling (i.e., increases the infrared absorption, responsivity, and detectivity) by an order of magnitude compared with a one-dimensional grating or 45° angle of incidence geometry.


doi:10.1063/1.110973
**PACS:** 85.60.Gz Additional Information

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